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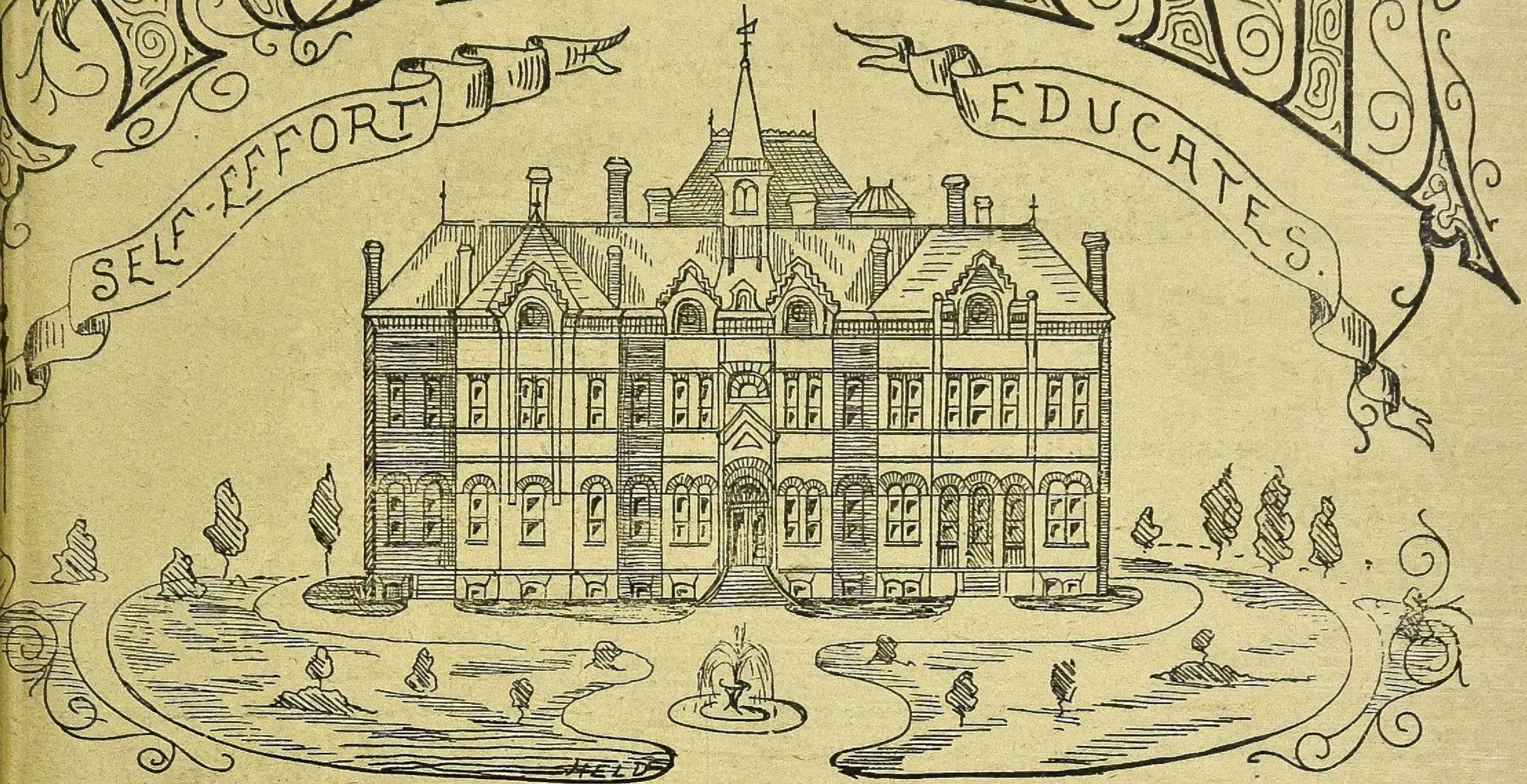

BRIGHAM YOUNG ACADEMY.

Vol. III.   PROVO, UTAH, MAY 1, 1894.   No. 12.

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Vol III. PROVO, UTAH, MAY 1, 1894. No 12.

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EDITORIALS.

BRIGHAM YOUNG ACADEMY SUMMER SCHOOL.

The Brigham Young Academy Summer School, to begin July 9th, and continue five weeks, closing with a joint teachers' institute of one week, promises to be the most popular and beneficial school yet held in Utah. So marked has its success been heretofore, in awakening an interest in eduational questions, by bringing before the teachers of Utah the best Eastern and local talent, that this increase of six weeks instead of two weeks has been urged upon the managers of the school. Further, there seems to be a demand on the part of the teachers of Utah for greater opportunities for summer study. The teachers seem to realize that they must thoroughly equip themselves for the great office of instructor. Further, the Academy serves the schools as the wholesale house does the mercantile institution. It obtains educational ideas and enthusiasm from the East, and becomes the center of distribution for the Territory, and this year it will not be behind in its distribution of educational thought. Members of its faculty have traveled in the East during the past year, and have especially investigated the methods of the normal schools. The results of these investigations will be given to the 'teachers, bringing them thus in touch with the educational spirit of the age.

Along this line it is proposed to give in the Summer School a course of instruction in child-study, and it is hoped that at the close of this course an association will be organized for the study of children. The emphasis given to the study of children is a modern thought, and it promises to be fruitful of results. The most important element in the school is the learner, as there can be neither teaching nor learning without him. In fact the school exists for him. It is proper, therefore, that he, psychologically and physiologically should be made a subject of study, his physical growth and development, as it conditions his mental growth and development; his mental growth and development, because the ends sought are these. It is well, therefore, that the subject of child-study should receive due attention, and the teacher be put in possession of the most approved methods of prosecuting his work. We are pleased to note in the circular of the Summer School that this course is offered.

Another excellent course, and one which will prove beneficial to the schools of Utah, is that offered in wood-work. We believe that along with intellectual culture the eye and the hand should be trained. This training is one of the best means of cultivating the attention, and without attention but few studies can be pursued with profit. We understand that this course will be so arranged that it can be adopted by the district schools with but very little cash outlay, and if it proves as successful in them as it has proven in the training school of the Academy, we are certain that every teacher will be pleased with the results.

There is one thing lacking which we take pleasure in calling the attention of the Summer School managers to and that is a cooking department. We are firmly of the opinion that some of the leading schools should establish a cooking department, where young ladies can be taught in the most scientific and approved method of preparing food. There is nothing so exasperating to a man as to sit down to a table laden with the bounties of life, and be unable to eat them because of ill-preparation. The cooking is bad, the bread is not proper, the meat is overdone, or undone, the potatoes are not properly dished, the fish is broiled in a very bad manner, and everything is wrong. With a short course of instruction the cook could have arranged such a dinner to be most palatable and inviting.

Then, too, there is an economical side to this. Scientific cooking is economical cooking. We recommend therefore, that the authorities of the Academy take this matter under consideration, and we trust that means will be devised to open up, if not in the Summer School, at least in the regular Academy, a cooking department.

THEORY AND PRACTICE OF EDUCATION.

METHODICS.

THEORY A.

(Notes from Prof. Brimhall's Lectures.)

ARITHMETIC CONTINUED.

Means:—The teacher must have tools, and we are inclined to believe with Rousseau that the apparatus which the teacher and pupils make is at least twice beneficial, and often more capacity to adapt means to ends is developed in the making of apparatus than in its use afterwards.

The artist will not fail for want of apparatus, he will get it from his environments, for he has a free admittance into the treasury vaults of nature's mineral, vegetable, and animal kingdoms, and with just a little tact and diligence the avenues of art are nearly all open to him.

For the study of Arithmetic the following inventory of means is suggestive of what is necessary:

1. Good black-board, extending on at least two sides of the room; six erasers; two pointers; five gross of best white crayons; one gross colored crayons; one pint of shoe-pegs; ten bundles of pencils—size sticks of ten in each bundle; one quart jar of each of the following: black beans; white beans; corn; one box tooth-picks; one gross buttons; one gross pins; one gross marble-like pebbles; one gross nails; one set of weights: pound, half pound, and ounce; one pair of scales or balances; one set of toy money; one hundred and forty-four cubic inch blocks; twelve one foot square boards; one pair of carpenter's compasses or divides; one set of pasteboard or wood surface and solid geometric forms all of which, with the aid of pupil committees, you can obtain and have cared for much more easily than you can plod along without them. You may desire an arithmetical chart or numeral frame either of which you can make.

Fruits and vegetables of the season are most excellent objects to illustrate partition. The school buildings, grounds, fences and walks, excavations, piles of brick, stone and wood, hay stacks, high trees and towers in the vicinity are all means whereby the "breath of life" may be breathed into this study.

As guide books on methods perhaps there are, to date, none better than those prepared by Griffin, the Vice Principal of the Cook Co. Normal School and published by A. Flannagan, Chicago. In the teaching of longitude and time a globe is quite indispensable.

The various measures and weights used in the metric system are also essential. As a book for teachers reference and for supplemental work Appletons' Numbers Applied is a most excellent work.

Methods.—In primary grades method should be objective. It must be borne in mind, however, that the use of objects may be carried too far. Objects are means, not ends, and just as soon as the pupil is capable of grasping the number relation without the object, its farther use in that line is more detrimental than beneficial.

Care must be taken that the mind grasps the relation of the numbers handled, and the best evidence the teacher can have that the child understands a principle is the objective illustration of the principle by the pupil.

If a pupil can take objects and show how many 2-3 apples there are in 4 apples, and what part of 3 cakes 1½ cakes is he comprehends the principle of division of fractions and the teaching of the processes by which the principle is most conveniently applied is a matter of secondary consideration and one upon which the best of teachers differ.

It is essential right here to remind the young teacher that he must not fail to obey the pedagogical laws, "Go from the known to the unknown."

"Let the idea precede the sign." And as a test that your work is not the reverse of what it should be, frequent questions should be asked by the teacher as to what the various number signs mean. Your pupil perhaps writes $2\frac{1}{3}$. Now ask him what story he has related by making those figures; or you write 3.05 acres, and ask the pupil to relate the story written in figures. If it is understood as it should be the pupil will say something like the following: "There is a piece of land containing three whole acres and five one-hundredths of another acre." Now you ask, "What does five one-hundredths of an acre mean to you?" The intelligent answer would perhaps be forthcoming, "It means that an acre has been partitioned into one hundred equal parts, called hundredths, and, five of those parts or hundredths are taken. The signs $+$, $-$, $\times$, $\div$, and $=$ may be taught in the same way.

We now consider the two great processes: Making the number (synthesis). Separating the number (analysis). Numbers are made in two ways: Frist, by uniting unequal numbers, in which case the process is called addition; second, by uniting equal numbers, by which we perform the process of multiplication, and from this we see the fallacy of saying that we multiply by a fraction, as multiplication always indicates increase. Now in making numbers the pupil should be led to and drilled in its construction from all previously known numbers, e. g., the pupil has a knowledge of the number 6, it is our duty now to lead him to 7, concretely then abstractly; first the six ones have another one added to it, and he sees that the name of the new number is seven. Now having made the new number by adding one to the old, it is next made of 2 and of 3 and 4, and in fact of all the combinations of the old numbers.

A little device on the board will aid in this work, and serve admirably for busy work, as

6 and ? = 7?
? and 5 = 7?
2 † ? = 7?
2 † 3 †? = 7?

Multiplication.—It requires little skill to show the pupil that this is a process of adding two or more equal numbers, and thorough drill in composing numbers by this process should be given; e. g., the number 8 is readily made of 8 ones, 2 fours, or 4 twos, and close observation will discover another error in arithmetical language, which asserts that four times five is twenty. Just take a nickel and put it four times into a pupil's hand and call for the twenty cents.

Separating numbers.—There are three processes employed: subtraction, which is the process of separating a number into two parts one of which is known; e. g., we have $17 our number; we spend $9, the known of the two parts; the other part, 8, is found by subtraction, and thus is our number 17 separated into two numbers. As soon as a number is once made it should be separated. We will suppose we have made the number 9; we then proceed to separate it. We take 8 from 9, 7 from 9, 6 from 9, 5 from 9, and so on to the lowest integer, and even may go into simple fractions, as $\frac{1}{2}$ from 9, $\frac{1}{4}$ from 9, $\frac{2}{3}$ from 9, $\frac{3}{4}$ from 9.

Division.—This process is, of course, simply separating a number into groups of equal numbers, when the number size of each group is known, and should be carried right along with the other processes. Again let us suppose we have made the number 9. We separate it into ones, then into twos, then threes, then fours, then fives, then sixes, then sevens, then eights. Right here great care should be taken to have things called by their proper names. In case 8 is separated into fives, the result should be called one five and three-fifths of another five, or one, and three-fifth-fives.

The blackboard work may be similar in all these processes.

Partition.—The separating of a number into equal arts when the size of one part is known. The simple partition of the number 9 would be one-ninth of it, one-eighth, one-seventh, one-sixth, one-fifth, one-fourth, one-third, and one-half of it. Evidently the getting of two-thirds of nine is less difficult than the finding of one-fifth of it; but the former goes beyond the line of partition and enters the field of number-making again, and is therefore a compound process; such processes, however, should be used as the teacher notes the ability of his pupils to perform the work, until a complete partition of the number is accomplished, which would require the finding of all the parts of the number obtainable without the use of any number greater than the one being partitioned. While it might be proper to ask for three-sevenths of 9, it would be quite inconsistent to require three-fifths of 9. as in the latter case number 12 would form a part of the process.

Comparison.—This should be practiced from the first; in forming an acquaintance with the number 2, the pupil should not only make it and separate it, but also compare it with 1 seeing how much greater it is than 1, how much less 1 is than 2, and what part 1 is of 2.

The comparison of the number 9 will be quite complete when it has been compared with all less numbers; then it is as follows: 9 is 1, more than 8; 8 is 1 less than 9 and is eight-ninths of 9. Perfom the operation with objects; then without the object, but concretely, as 7 apples are 2 more than 5 apples; 5 apples are 2 less than 7 apples and are also five-sevenths of 7 apples.

Application.—After the making, separating and comparing of a number with and without the objects, and thorough drill in the processes in the abstract, then are the processes with the number appied to business transactions suited to the likes and capacities of the pupils. In the application of numbers there is danger of getting into a rut in which nothing but marbles roll, pins stick, yards of cloth are sold, oranges are peddled, or apples are picked and ate.

Keep up on the plane of pleasure by giving variety, endless variety, to the work. Put the mind to counting cocoanuts, kangaroos, bananas, selling salmon and seal-skins; buying butter and beef, and the work will be done with an interest that puts mental efforts under the law of conservation of energy.

When is a number thoroughly taught? A new number is taught thoroughly when the pupil can easily and quickly make it of all the combinations of the old ones, separate from it all the combinations of the old ones, divide it by each of the old ones, partition by the old ones, compare it with each of the old ones, and apply it to life transactions.

Written processes.—Require 1st. A clear word statement of the example or a reference to page and number in the book; e. g. A stock man bought colts at $15 per head and sold them at $18.50 per head, thereby gaining $280; How many did he buy?

2nd. The symbolic statement, as $280 ÷ ($18.50—$15) = ?

3rd. The process.

$18.50
$15.00

$3.50 gained on 1 colt.
$3.50 | 280.00 (80 colts purchased answer.
2800

4th. The proof, which, while not always necessary, is one of the very best means of causing independent and accurate thought.

Language Analysis.—Certainly thought must precede expression, but expression not only aids, but often adds to thought. A written or an oral analysis of at least one example each day should be required of every pupil; e.g. Since one colt cost $18.50, and is sold for $15, there will be a gain on each colt of the difference between $18.50 and $15, which is $3.50, therefore $3.50 is the gain on 1 colt. Since $3.50 is the gain on 1 colt, 280 will be the gain on as many colts as there are $3.50 in $280, which is 80, therefore the man purchased 80 colts.

Oral analysis should be similar.

SUGGESTED STEPS.

A problem is composed of two parts: the statement and the question: these two parts must be clearly seen by the pupil, and to secure the indispensible "thinking on a line," and the constantly aimed-at "orderly execution," the following steps are suggestive for the pupil: "First, I must think what is known in this example; second, I must think what is to be found out; third, I must think how I can find each thing in its order."

All these are mental, mind or head steps. "There are steps for my hand also: First, I must arrange each example by itself; second, I must make plain figures; third, I must give each of my results a name, either by words or sign.

A perfect understanding of a principle and its application is acquired only when the pupil can say of his own example, "I see; I understand; I have done it; I can prove it."

SPECIAL PRINCIPLES APPLIED

Average:—Have the pupils get the average age of the class, then of the boys, and then of the girls. Call attention to the two columns, the one forming the divisor and the one furnishing the dividend.

Fractions:—Hold to the practice of proceeding first, with the object; second, with the sign, and third, with numbers abstractly.

Common fractions should be taught before decimals in detail. Keep up the story telling; 9-16ths pie on the blackboard would call for something like this: "A mince pie was cut into 16 pieces, and we have 9 of these pieces, and there must be 7 pieces left." 85 ham would form the matter for the following: "A ham was cut it 100 slices called hundredths and we have 85 of these slices, therefore we have 85 one-hundredths of a ham."

Percentage:—If decimal fractions are understood, percentage comes perfectly natural.

First establish clearly the idea that per cent. means one or more hundredths of some unit or number of units, and that every number contains 100 per cent. of itself; it is easily seen that ½ equals 50 per cent. and one-fifth equals 20 per cent, 1½ times any number must be 150 per cent. of it, and 6 times any number 600 per cent. of it; make clear the idea that one per cent. is one whole hundredth of it, and most of the difficulties will vanish.

Don't teach cases; teach percetage.

Give examples like the following for drill. What is 8 per cent of $100? What part of $100 is $70? What per cent of $100 is $70? How many per cent of $70 is $100 equal to?

Compound Numbers:—Some of the simple tables of weights and measures, should be learned and applied in the lower grades.

A complete set of apparatus as bu., pk., qt., pt., ft., yd., rd., lb., oz.; figures of surfaces and solids, can be obtained through the pupils, and used to great advantage; one boy will bring a peck measure, one a yard stick, one an old pair of scales; a little girl will furnish a pint cup or a gallon bucket; the little girls will make little sacks and the boys will fill them with grain and label them; as, "Wheat, 60 lbs. to the bu."

Measurements: — Model forms of surface should be used for illustrations, and pupils should visit lumber yards, excavations, wood piles, measure them, and bring the dimensions to the class for work.

Measure the room, the wall, the lumber in the floor and the roof. In all higher grade work, diagramatic, tabular, and test-question, reviews are indispensable.

Give combination examples all through the course; as, In a square ranch, the peremeter of which is 1-340ths the diameter of the earth, how much of the surface of Utah?

In teaching profit and loss, use toy goods; have private mark and show pupils how to mark goods above and below cost.

Take the phrase, "w-h-o-s-e f-a-u-l-t," you have ten letters, one for each figure: w, equals 1; h, equals 2; o, equals 3; s, equals 4; e, equals 5; f, equals 6; a, equals 7; u, equals 8; l, equals 9; t, equals 10.

Now give examples like the following: What must a pair of boots that cost e f t, be sold for to gain 2½ per cent? What did a coat cost, which when sold for $15 gained 15 per cent on its cost? What per cent. is made by selling a hat for $3.50, that cost h. w. e.?

Teach interest and discount practically, having pupils give each other their notes, make payments on them, and calculate the interest both simple and compound.

Commission may be taught practically under the headings of commission on the sale of property, and commission on purchase of property. Take great pains to make clear the idea that an agent is entitled to commission for nothing except the amount spent for the merchant or owner. A thorough knowledge of the two following examples will fix the principles in the mind:

1. A sent B $300 with which to buy wheat, allowing him 8 per cent commission; how much will B make, and how many bu. of wheat will A receive at 75 cents per bu.?

2. A sent B $300 worth of wheat to sell, allowing him 8 per cent commission; how much money will each receive?

A very effectual lesson in discount can be taught by having pupils write out notes, exchange them, and then trade them off to each other at a discount.

Proportion:—This requires a somewhat developed stage of reason, and should be introduced on a very simple basis of cause and effect. Remember that cause is no part of effect, but that one cause is a part of a kindred one, just as things of the same kind are parts of each other. Make clear the idea that effects increase or decrease in proportion to the relative increase or decrease of their cause.

Longitude and Time:—Take your globe and show that the sunlight passes over 360 degrees of longitude in 24 hours time, and the pupils readily discover by division that there are 15 times as many degrees of longitude, as there are hours, thus making one hour of time equal to 15 degrees of longitude. If the idea of the earth's revolving from west to east has been made plain, it will be an easy matter to understand that longitude east is always ahead of west, and therefore time in longitude east is ahead of, and must be added to the time of the place west from which the calculation was made. In this work the wall map and geography are valuable aids. Show how watches get ahead or behind time as the owners travel east or west.

Give examples like the following: "If I take a sleeper, and on awakening in the morning find my watch points to 40 minutes past 7, just as the factory whistle of the town blows for 7, which way have I been traveling during the night, and how far am I from home on a direct line?

Now my watch has gained no time; it has ticked on faithfully and regularly, and at home where I was yesterday the factory hands have been at work full 40 minutes, but I have been going towards the later part of the day or towards the setting sun.

The next question is how far have I come? Let me see; time is 15 times as much as longitude, so, as one minute of time equals 15 minutes of longitude, 40 minutes of time equals 40x15 minutes of longitude, or since 60 minutes of longitude equals 1 degree, 600 minutes of longitude will equal 10 degrees of longitude; therefore I have traveled west 10 degrees of longitude.

If you should go to the Midwinter Fair in San Francisco, what time would your watch, keeping Utah time, point to at high noon there?

Roots and Powers:—The teaching of square root and cube root should be done with blocks as aids.

It is difficult to explain the why the square of the base plus the square of the altitude of a right angled triangle, equals the square of the hypotenuse, but the correct use of the principles can be proven by practical application. Have the boys measure off 8 feet along one wall of the room, then 6 feet along the other, running at right angles with the first; now have them measure across from the end of each line and it will be found to be just 10 feet; square the 10 and you have 100; square the 6 and the result is 36; square the 8 and 64 is obtained; add 64 and 36 and you have 100. Remember that teaching, as Dr. Gordy says, is securing and properly using the learner's attention.

PERSONAL.

It is to be regretted that Miss Lottie Rowntree, our esteemed, efficient and faithful Assistant-Librarian, necessarily withdraws on Wednesday, 2nd inst. Miss Rowntree has shown herself an able officer and faithful worker, and receives the heartfelt thanks of the Faculty and students, she has so zealously served.

ELEMENTARY SCIENCE LESSONS.

In many of the lower schools of the country there is a sad neglect of the teaching of science lessons. No provision, in many instances, is made for this very important feature of school work, and oftentimes where the subject is taken up, no systematic mode is followed the classified knowledge then being not consistently taught. To aid teachers blessed with few opportunities, and far removed from the center of vigorous, progressive, educational movements, and also to cause others to be more systematic in their work, is the aim of this article.

The topic of science lessons is such a broad one that, indeed, would it be folly to attempt to elaborate upon it in one short paper; therefore if we may see the practical side of the question now, will be all that can be accomplished.

One thing attempted and completed would, it seems, be far better than two or three bits of work commenced and only half finished. More power would be gained by teacher and student by thus carrying on work in the schoolroom. How often have we seen teachers have a daily and weekly program, all neatly written out, and occupying a prominent position is the hour set apart for science lessons. But what are those lessons? In many cases a conglomeration of subjects. A lesson on botany, one on zoology, then one about specific gravity, then comes oxygen from chemistry, and lastly the moon is taken as the type from astronomy.

Of course, this arrangement will be of some benefit to those hungry minds grasping for knowledge, but would it be not much more preferable that a systematic course be given than such a rambling one? If the hours permit and the time given in the grades warrant, then there may be given parallel studies in all these branches. But suppose that one hour per day be devoted to science, and surely less than five hours per week could not be given to such an important topic, it would be much more profitable, than to jump here and there, to systematize and take, we would suggest, ten weeks each in botany, zoology, geology and physics.

This plan would apply to the seventh and eighth grades of the district schools; but should science lessons not be introduced before these grades are reached? Decidedly so. From the time that the little one steps over the line dividing the nursery from the kindergarten to the time that the degree is conferred, science should form a part of all the work. Yes, even before the tot enters the child's garden, the science of the flowers, the birds, the household should be familiar, to a certain extent, to his little mind.

Likely one of the first obstacles to impede the teacher when the course in science lessons is contemplated, is the idea that to carry on a course, valuable and expensive apparatus must necessarily be purchased of some great supply house. This is a mistake. Apparatus to demonstrate to a certain degree of thoroughness all the fundamental principles of physics, for example, such as you will be expected to teach, may be had for a few dollars. 'Tis not so much the outlay in cash that must be relied upon, as it is the work and time expended in making the pieces, both by teacher and students.

To show how cheaply these bits of apparatus may be furnished let us examine a few.

The resultant motion of several motions may be discovered by a device instead of by diagrams. Saw a piece of board round. Have it so that it may be placed on a stand. Attach pulleys and strings. Have cord work over the pulleys. By putting on weights you may get the direction and distance traversed and also the comparative velocity. A mirror may also be placed upright on the board, and thus can be shown the angle of incidence and reflection are equal.

Sir William Thompson's hypothesis of atoms and their action may be thoroughly studied by having a box open at one end over which a piece of cloth is loosely hung and a hole in the other end. Hydrochloric acid may be put in the box in a small dish, and ammonia be placed in a dish beside the acid. Fumes will be the result of the chemical union of the acid and the alkali. Hit with the hand the cloth of the box and the beautiful vortex rings are the result. Force might be studied with a dozen pieces of furniture in the room.

The principle of the pendulum can be easily mastered. Your ruler is good enough to introduce levers. Have the students make a wheel and axle, inclined plane, wedge and pulleys, and let practical, quantitative work be done. How easily then the idea of weight, standard and unit becomes to the students.

In a spoon place a bit of ice—a solid; warm it, and a liquid is the result; heat still higher and an invisible gas is given off. Pressure of liquids by a little hard work may be shown in as simple a manner.

Time will not permit us to go farther; but we feel confident that the hints may be materialized, because they have been put into practice. Thus we might go on. Pumps may be made, barometers, siphons. A few inexpensive pieces of apparatus will illustrate heat, lenses, a prism, that may be made, bits of broken mirrors, a whirling table and some paints, and you have all that is needed for your work in light. Your sonometer, some cardboard, a tuning-fork, your bell, a violin, and you are prepared to demonstrate the main principles of sound.

For magnetism, some magnets, steel watch spring, iron filings, a compass, and, if possible, a loadstone, and this interesting part of physics can be neatly taught.

But an electric machine! Yes, it too can be constucted. We have seen one made by a teacher that was almost as good as an expensive one brought from the East. Batteries may be arranged at any time.

We have dealt more at length on physics, because that part of the work requires comparatively a great deal of appratus. Other subjects could be just as profitably dwelt upon. Are not these mountains this spring covered with flowers? Butterflies are flitting here and there. Trips to the canyons for specimens of minerals are inexpensive; and, in fact, the field of elementary science lessons is broad, and well will he be paid who trods within its sacred confines.

Do not be afraid to try. Work, and success will crown your efforts.

A splendid manual for the class of work suggested in physics is "Practical Physics," by Chute. D. C. Heath & Co, publishers, Boston.

Jackman's "Nature Studies," Henry Holt Co's, New York, is splendid for suggestions in general work.

But if your time be limited, and a more general course is desired, we know of no text-book better adapted for work than Talmage's "Domestic Science" and "First Book of Nature."

There is opportunity in every school to do great good in science work. We need not go to some far distant clime to collect our cabinet, nor to some expensive workshop for apparatus, but taking the things that we have around us, we may make our work thorough and our influence felt for good by our work in science lessons.

W. E. Rydalch.

THEOLOGICAL.

LECTURES ON THE LIFE OF CHRIST.

Given at the Missionary Meeting, on Sunday Morning—B. Y. Academy Provo.

I. John the Baptist's preparation for Christ. The national, social and religious condition of the Jews.

II. The Incarnation of Christ, and its teaching; illustrations of the principle of Incarnation in human life.

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VI. The nature of Christ's Kingdom; Baptism as the gate thereto. The Divine supper.

VII. The personal friends of Christ. The college of the Apostles; Church authority.

VIII. The attitude of the Jews towards Christ; their criticism; their final rejection of Christ.

IX. Christ as the unique figure in the world's history. The drama of His life, and the tragedy of His death. The doctrine of the Atonement.

X. The resurrection of Christ. His glorification. The perfect type of redeemed humanity.

MISCELLANY.

JOINT COUNTY TEACHERS' INSTITUTE.

(To be held in Provo at the close of the Summer School, Augus 13-17, 1894.

PRELIMINARY ANNOUNCEMENT.

It is the design of the managers and county superintendents, who have in charge the coming joint institute, to make the sessions most profitable and instructive to all grades of teachers by introducing along with the theoretical instructions practical class work, and by arranging for teachers who have had but little professional instructions to take practical work under critic teachers. At the close of each day's session of the practice school, teachers in training will meet with critic teachers for criticisms and suggestions. Arrangements are further made for review classes, and private instructions, if necessary, in all subjects taught in the District Schools, besides others, such as Algebra, Geometry, Commercial Arithmetic, Book-keeping, Phonography and Type-writing, Rhetoric and Composition, French, German, General History, the Sciences, Vocal Music, etc., the idea being to furnish a one week's review in all subjects interesting and instructive to teachers. This is made possible through the kindness of the members of the Faculty of the Brigham Young Academy, and other teachers who have volunteered their services for the institute week, free of charge.

For the regular institute work, the services of Dr. B. A. Hinsdale, Professor of the Theory and Practice of Teaching in the University of Michigan, together with such local talent as Dr. K. G. Maeser, Dr. J. E. Talmage, Prof. Stewart, Prof. Brimhall and others, have been secured.

One feature of the week's work will be a short course of lectures on child-study by Prof. Cluff, Jr., and the organization of an association for the study of children.

Dr. Hinsdale's lectures will be on the following subjects (1) The Science and Art of Teaching, dealing with the fundamental facts of teaching, as the activities of the mind and the educational values of studies, and with the rules and methods of teaching as deduced from these facts; (2) Special Methodology; (3) School Management and School Superintendency; (4) Popular Lectures on the General Aspect of Education on History, and on the Personal Culture of the Teacher. There is no man in the United States better qualified to instruct teachers on the above subjects than Dr. Hinsdale.

EXPENSES.

To all teachers from counties making this their official institute, tuition is free; to others three dollars.

Railroads offer a reduced fare as follows: Full fare to Provo, and one-fifth fare returning. Teachers will be sure and obtain certificate from the agent where they purchase tickets.

Board and rooms can be had for from $2.50 to $3.50 per week.

Suggestions from county superintendents and teachers regarding the institute will be gladly received, as the desire of the managers is to furnish that which the teachers need.

For further information address

B. Cluff, Jr.,
G. H. Brimhall, or
D. H. Christensen.

BABY ARETTA.

(LINES ADDRESSED TO A LITTLE NAME-SAKE.)

Tiny bud from God's own Garden
By an angel hand sent down—
Plucked from 'neath the smile eternal
Planted 'neath the world's cold frown;
Mighty change, and yet how tender
This transplanting to the sod!
O how sweetly thou art shielded
By that loving Father—God!

On thy couch—a mother's bosom,
In the halo of her love,
'Neath thy crown—a father's blessing,
Type of gifts from Him above,
Hast thou felt, thou wakening floweret,
One chill breath from earth winds blown?
Has the fondness that enfolds thee
Kept the storm cloud still unknown?

Strong this sweet parental guardship—
Sorrow's hand is yet more strong—
She, the florist and the pruner,
Thou must feel her stroke ere long;
Sweet the breath of fond affection,
Like to silken breezes blown,
But the searching blast of trouble
To thy soul must yet be known.

Tears—oft bittter—are the fountains,
For the verdure of thy life,
Death the reaper who will pluck thee
From the field of worldly strife;

And I weep that thou art with us,
Still rejoicing thou hast come,
For I know what hand hath sent thee
From yon Paradise, thy home.

Grow fair one, unfold each power
Safely hidden in thy heart;
And within the plan immortal
Take thine own allotted part;
Love and beauty by thee given,
Let the great world round thee feel,
Till it grows more true and tender,
And the heavenly joys more real.

A. Y

MUSIC.

THE scale from which our songs are written is composed of seven steps, five large steps and two small steps, the eighth step being one of the next higher octave.*

Nature has arranged the scale so that by following certain rules harmonius effects will be the result. Before proceeding farther we desire to call attention to the construction of the ladder. The steps from 1 to 2, 2 to 3, 4 to 5, 5 to 6, 6 to 7 are large steps called major, and 3 to 4 and 7 to 8 are small steps, called minor. In harmony 1 and 8 are considered the same.

Every key tone is considered 1; 8 is 1 of the octave above, bearing the same relation to the other steps as 1 of the lower octave.

The simplest form of counterpoint, or of adding another part to a given melody or subject is as follows:

1 accompanies 1; $\underset{\cdot}{7}$ below accompanies 2; 1 accompanies 3; 2 accompanies 4; 3 accompanies 5; 4 accompanies 6, etc.

1ST MELODY.

Treble. 1 2 3 4 5 4 3†— 3 4 5 4 3 2 1—
Counterpoint Alto. 1 $\underset{\cdot}{7}$ 1 2 3 2 1— 1 2 3 2 1 $\underset{\cdot}{7}$ 1—

NOTE:—When 1 is taken in the melody use 1 for the alto.

2ND MELODY.

Alto to be added.

1 3 5 5 6 6 5— 5 4 3 4 3 2 1—

When the melody takes 7 and 8, variety and strength is added to the harmony by inverting the figures. Take 2 to accompany 7; we used 7 to accompany 2 in the preceeding exercises; also take 3 to accompany 8, which is 1 above. We used 1 to accompany 3 and so three is good company for 8 or 1 above.

$\genfrac{}{}{0pt}{}{2}{7}$ inverted becomes $\genfrac{}{}{0pt}{}{7}{2}$; $\genfrac{}{}{0pt}{}{3}{1}$ inverted becomes $\genfrac{}{}{0pt}{}{8\text{-}1}{3}$.

3RD MELODY.

1 3 5 5 6 7 8— 8 7 6 5 6 7 8—
1 1 3 3 4 2 3— 3 2 4 3 4 2 3—

When 7 and 8-$\dot{1}$, $\dot{2}$, $\dot{3}$ above are taken in the melody invert the third, which becomes a sixth; use 2 with 7, 3 with 8-$\dot{1}$, 4 with $\dot{2}$, 5 with $\dot{3}$, 6 with $\dot{4}$, etc. The dot above the figure indicates the upper octave; a dot below the figure indicates the lower octave. When no dot above or below, the middle octave is used.

4TH MELODY.

8 $\dot{1}$ 7 $\dot{1}$ $\dot{2}$ $\dot{2}$ $\dot{3}$ $\dot{2}$ $\dot{1}$ $\dot{2}$ $\dot{3}$ $\dot{4}$ $\dot{3}$ $\dot{2}$ $\dot{1}$—
3 3 2 3 4 4 5 4 3 4 5 6 5 4 2—

5TH MELODY.

Alto to be added.

8 $\dot{1}$ 2 $\dot{1}$ $\dot{1}$— 7 $\dot{1}$ $\dot{2}$ $\dot{2}$ $\dot{3}$ $\dot{2}$ 1—

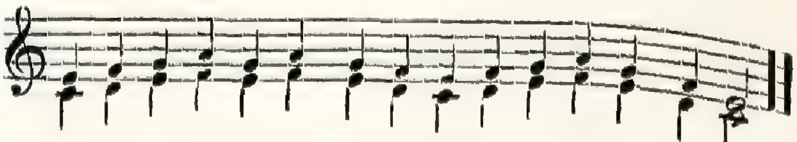
6TH MELODY.

Thirds.

3 4 5 6 5 6 5 4 3 4 5 6 5 4 3—
1 2 3 4 3 4 3 2 1 2 3 4 3 2 1—

THE 6TH MELODY PRESENTED ON THE STAFF.

Thirds.

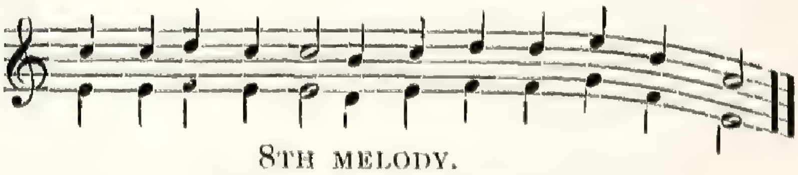


7TH METODY.

Sixths.

8 $\dot{1}$ 2 $\dot{1}$ $\dot{1}$— 7 $\dot{1}$ $\dot{2}$ $\dot{2}$ $\dot{3}$ $\dot{2}$ $\dot{1}$—
3 3 4 3 3 2 3 4 4 5 4 3—

7TH MELODY ON THE STAFF.



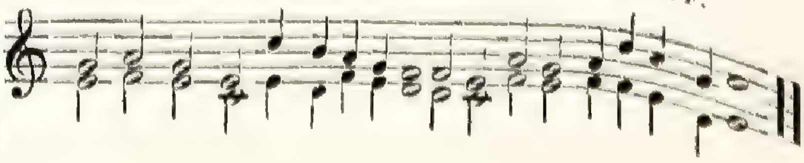
8TH MELODY.

Thirds and sixths.

5— 6— 5— 3— 8 7 6 5 4— — —
3— 4— 3— 1— 3 2 4 3 2— — —

4— 3— 6— 5— 6 $\dot{2}$ 8 7 8— — —
2— 1— 4— 3— 4 4 3 2 3— — —

8TH MELODY PRESENTED ON THE STAFF.



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* The student should be able to sing any step of the ladder at will.

† A dash indicates the continuation of the tone one beat longer

HERE AND THERE.

Only four more weeks of school.

Soda water at Smoot Drug Co.

Spring suits, but not much spring.

What are you going to do vacation?

Why not attend the Summer school.

Examinations will soon commence; remember they tell the tale.

For the purest drugs and toilet articles call at Smoot Drug Company.

Spring work has taken quite a number of S. S. Normals out of school.

The class in Medical Physiology began original work in Room H last week.

Who is the heart smasher of the S. S. class, or is it "Wright" that they have one?

Prof. Cluff has taken charge of the History of Pedagogy. A thorough review will be held.

The young ladies are complaining that the young men are too poor to take them buggy riding this spring.

We feel confident that Harvy Cluff will be an excellent chaplin for Normal Day. In fact he is the best one we could get.

"Environments" is the subject of the next evening lecture, to be delivered by Prof. Brimhall before the S. S. Normals.

The M. I. students are vigorously pushing their Normal work. They have now taken up Part II of the manual as published in the *Contributor*.

The lecture by Dr. James E. Talmage, President-elect of the University of Utah, subject, "Benjamin Franklin," was listened to with pleasure by a large gathering Thursday evening in Pedagogium.

The question has been asked us, if it is permissable for young men when writing to their lady, to forget to put stamp on the same. It may be well to ask one of the lady students for an answer. And perhaps her father.

Brother Eggertsen's Manual Arithmetic class completes their work this week and will commence a review for the remainder of the semester.

The members have hinted that some of the students will try and ride a horse through examination by the way they are neglecting their work.

We are grieved to note the many vacant chairs that meet our gaze when entering the class rooms. Students, try and remain with us until the close.

A. L. Booth, a former instructor of the Academy, and now one of the assistants in the Academy Sunday School, has left for a mission to Great Britain.

The lecture given by Prof. Paul, subject the "Beautiful," illustrated the principles of tastes and theory of beauty were nicely put forth by the able speaker.

Our graduating class are working hard for their final examination; they wish to be the best class graduated from the B. Y. A., and we think they will.

The ball given on the 20th of April, by the Athletic Club, was the ball of the school year. The boys did themselves proud, and saw that all had a good time.

Those students who leave their classes to see baloon ascensions may fail at the close of examinations that they have been looking at too many aerial objects.

The Commercial College students expect to give an excellent program for their commencement exercises. We feel confident that it will be equal to any yet given.

Room 10 has been fitted up as an office for the Principal of the Preparatory and Normal classes, Dr. Hardy having moved into Room 12 with the Medical and Normal Physiology classes.

Specimens of school work in all the departments are being prepared for the Midwinter fair. We think the Academy will be well represented there, and Utah visitors will be proud of our exhibit.

Astronomy is getting so interesting that young folks remain up the whole night to examine the stars. We would not object to this if they would let others sleep.

The officers of the M. I. Association of Springville gave a sociable on the 26th ult., in honor of Prof. G. H. Brimhall. Those who attended said it was a most pleasant affair.

Judge Smith gave an interesting lecture before Polysophical. Subject, "The Legal Profession." Also Prof. Christensen and Colman gave some very beautiful violin selections.

The Botany and Physical Geography classes made an excursion to the mountains last Saturday, to gather botanical specimens. Rock Canyon was the place, and a tired crowd the result.

What! Do you think they will shave you for nothing and give you a drink? No. But they will give you the best shave, hair cut or shampoon, of any place in town for the money, at Cluff and Scott, under Commercial Bank.

Professors Cluff and Brimhall are now taking turns in giving the minds of the S. S. Normals vigorous psychological rubbings. Let us hope the result will be as wonderful as when Aladdin rubbed his magic lamp.

One of the local papers contained an insinuation that a couple of students of the B. Y. A., a lady and a gentleman, had been guilty of stealing flowers from the Courthouse grounds. We trust there is no foundation in fact for the slur.

Much praise is due the students of the third year Normal class, for their hard and efficient work, both in their class as well as incidental work They are a band of students, as are many of the second year Normals. We hope they all may be with us again next year, and as many more who are known as hard workers.

Student: I have seen a black snake kill a rattle snake as large as himself, and then swallow him.

Teacher: Suppose the two would start at the tail and commence to swallow each other, which one would get swallowed.

Student: Both.

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CURRENT TIME TABLE.

IN EFFECT APRIL 29th, 1894.

LEAVE PROVO FOR EAST AND SOUTH.

No. 2.	For Grand Junction and points east	9:26 a. m.
No. 4.	For Grand Junction and points east	9:35 p. m.
No. 6.	For Springville, Thistle, Sanpete, and Sevier	3:55 p. m.
No. 8.	For Springville, Spanish Fork, Payson and Eureka	6:20 p. m.

LEAVE PROVO FOR WEST.

No. 1.	For American Fork, Lehi, Salt Lake, Ogden, and the west	11:55 a. m.
No. 3.	For American Fork, Lehi, Salt Lake, Ogden and the west	10:17 p. m.
No. 5.	For Am. Fork, Lehi and Salt Lake	4:15 p. m.
No. 7.	For American Fork, Lehi and Salt Lake	8:25 a. m.

ARRIVE AT PROVO FROM EAST AND SOUTH.

No. 1.	From Denver, Grand Junction and points east	11:55 a. m.
No. 3.	From Denver, Grand Junction and points east	10:17 p. m.
No. 5.	From Springville, Thistle, Sanpete, and Sevier	4:15 p. m.
No. 8.	From Springville, Spanish Fork, Payson and Eureka	8:25 a. m.

ARRIVE AT PROVO FROM WEST.

No. 2.	From California, Ogden, Salt Lake, Lehi and American Fork	9:26 a. m.
No. 4.	From California, Ogden and Salt Lake,	9:35 p. m.
No. 6.	From Salt Lake, Lehi and American Fork	3:55 p. m.
No. 8.	From Salt Lake, Lehi and American Fork	6:20 p. m.

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☞Passenger train for Salt Lake at 4:30 p. m.
☞Passenger train for South at 9:40 a. m.

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W. G. CRAIG, - - AGENT

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